

What is claimed is:

1. A wireless communication terminal, comprising:

a software defined radio having a first wireless unit which transfers a wireless signal, a signal processor including a reconfigurable unit being able to change signal processing contents of the wireless signal transferred by said first wireless unit a signal processing controller which controls reconfiguration of the signal processing contents for said reconfigurable unit, and a first controller which controls said signal processor and said signal processing controller;

a cellular type wireless equipment having a second wireless unit which transfers a wireless signal by a cellular method, and a second controller which controls said second wireless unit; and

a control signal line which transfers a control signal necessary for establishment of communication between said first and second controllers.

2. The wireless communication terminal according to claim 1, wherein said control signal line transfers said control signal indicating that said cellular type wireless unit has taken restriction of transmission, from said second controller to said first controller.

3. The wireless communication terminal according to claim 1, wherein said control signal includes at least one of information relating to a wireless channel structure, information relating to carrier configuration for control, system operational information, congestion restriction information, country code information, wireless system type information, general calling area type information, channel re-establishment request information, channel allocation notification, and channel allocation.

4. A wireless communication terminal, comprising:

a first software defined radio having a first wireless unit which transfers a wireless signal, a signal processor including a reconfigurable unit being able to change signal processing contents of the wireless signal transferred by said first wireless unit, a signal processing controller which controls reconfiguration of the signal processing contents for said reconfigurable unit, and a first controller which controls said first wireless unit, said signal processor and said signal processing controller;

a second software defined radio having a second wireless unit which transfers the wireless signal in a range narrower than a cellular type equipment, and a second controller which controls said second wireless unit; and

a control signal line which transfers a control signal necessary for establishment of communication between said first and second controllers.

5. The wireless communication terminal according to claim 4, wherein said control signal line transfers said control signal indicating that said cellular type equipment has taken restriction of transmission, from said second controller to said first controller.

6. The wireless communication terminal according to claim 4, wherein said control signal includes at least one of information relating to a wireless channel structure, information relating to carrier configuration for control, system operational information, congestion restriction information, country code information, wireless system type information, general calling area type information, channel re-establishment request information, channel allocation notification, and channel allocation.

7. A wireless communication terminal, comprising:

a software defined radio having a first wireless unit which transfers a wireless signal, a signal processor including a reconfigurable unit being able to change signal processing contents of a wireless signal transferred by said first wireless unit, a signal processing controller which controls reconfiguration of the signal processing contents for said reconfigurable unit, and a first controller which controls said first wireless unit, said signal processor and said signal processing controller;

a cellular type wireless equipment having a second wireless unit which transfers the wireless signal by a cellular method, and a second controller which controls said second wireless unit;

a simple wireless equipment having a third wireless unit which transfers the wireless signal in a range narrower than said cellular type wireless equipment, and a third controller which controls said third wireless unit; and

a control signal line which transfers a control signal necessary for establishment of communication between said first, second and third controllers.

8. The wireless communication terminal according to claim 7, wherein said software wireless terminal can operate as a cellular type wireless equipment; and

said control signal line transfers said control signal indicating that said software defined radio has taken restriction of transmission, from said first controller to said second and third controllers.

9. The wireless communication terminal according to claim 7, wherein said control signal includes at least one of information relating to a wireless channel structure, information relating to carrier configuration for control, system operational information, congestion restriction information, country code information, wireless system type information, general calling area

type information, channel re-establishment request information, channel allocation notification, and channel allocation.

10. A wireless communication terminal, comprising:

a first software wireless terminal having a first wireless unit which transfers a wireless signal, a first signal processor including a first reconfigurable unit being able to change signal processing contents of the wireless signal transferred by said first wireless unit, a first signal processing controller which controls redefinition of the signal processing contents for said first reconfigurable unit, and a first controller which controls said first wireless unit, said first signal processing unit and said first signal processing controller;

a second software wireless terminal having a second wireless unit which transfers a wireless signal, a second signal processor including a second reconfigurable unit which can change signal processing contents of the wireless signal transferred by said second wireless unit, a second signal processing controller which controls reconfiguration of the signal processing contents of said second reconfigurable unit, and a second controller which controls said second wireless unit, said second signal processing unit and said second signal processing controller; and

a control signal line which transfers a control signal necessary for establishment of communication between said first and second controller.

11. The wireless communication terminal according to claim 10, wherein said first software defined radio has a function of a cellular type wireless equipment which transfers a wireless signal by a cellular method;

said second software defined radio has a function of a simple wireless equipment which transfers a wireless signal in a range narrower than the cellular method; and

said control signal line transfers said control signal indicating that said first software defined radio has taken restriction of transmission, from said first controller to said second controller.

12. The wireless communication terminal according to claim 10, further comprising an interface circuit which transfers a signal including said control signal between said first and second software wireless terminals; and

wherein said second software defined radio is connected to said first software defined radio in detachable manner, and transfers signal processing contents between said first and second signal processors, via said interface circuit.

13. The wireless communication terminal according to claim 10, wherein said control signal includes at least one of information relating to a wireless channel structure, information relating to carrier configuration for control, system operational information, congestion restriction information, country code information, wireless system type information, general calling area type information, channel re-establishment request information, channel allocation notification, and channel allocation.

14. A wireless communication terminal, comprising:

at least one of first transferring units each being provided corresponding to each of at least one of wireless systems to which transmission suspension obligation of radio wave is imposed on a condition prescribed in advance;

at least one of second transferring units each being provided corresponding to each of at least one of wireless systems to which transmission suspension obligation or radio wave is not imposed; and

a transmission suspension controller which when at

least one of said first transferring units stops transmission of radio wave by said transmission suspension obligation, supplies a transmission suspension control signal indicating transmission suspension of radio wave for all the other said first and second transferring units;

said first and second transferring units which received said transmission suspension control signal have transmission suspension units which suspend transmission of radio wave, respectively.

15. The wireless communication terminal according to claim 14, wherein said first transferring unit includes:

a digital unit which receives said transmission suspension control signal, and performs digital signal processing to generate a digital transmission signal;

a D/A converter which converts said digital transmission signal into an analog transmission signal;

a modulator which performs modulation processing for said analog transmission signal to generate a modulation signal;

a power amplifier which performs power amplification of said modulation signal; and

a power supply unit which supplies power to at least said power supply unit;

wherein said digital unit suspends generation processing of said digital transmission signal and outputs a transmission suspension signal to said transmission suspension unit, upon receiving said transmission suspension control signal.

16. The wireless communication terminal according to claim 14, wherein said first transferring unit includes:

a digital unit which receives said transmission suspension control signal and performs digital signal processing to generate a digital transmission signal;

a D/A converter which converts said digital

transmission signal into an analog transmission signal;

a modulator which performs modulation processing for said analog transmission signal to generate the modulation signal;

a power amplifier which performs power amplification of said modulation signal; and

a power supply unit which supplies power to at least said power amplifier,

wherein said digital unit suspends generation processing of said digital transmission signal, upon receiving said transmission suspension control signal; and

said transmission suspension unit suspends power supply for at least said power amplifier, upon receiving said transmission suspension control signal.

17. The wireless communication terminal according to claim 14, wherein said first transferring unit includes:

a digital unit which performs digital signal processing to generate a digital transmission signal;

a D/A converter which converts said digital transmission signal into an analog transmission signal;

a modulator which performs modulation processing for said analog transmission signal to generate a modulation signal;

a power amplifier which performs power amplification of said modulation signal; and

a power supply unit which supplies power to at least said power amplifier,

wherein said transmission suspension unit suspends power supply for at least said power amplifier, upon receiving said transmission suspension control signal.

18. A wireless communication terminal, comprising:

at least one of first transferring units each being provided corresponding to each of at least one of wireless systems to which transmission suspension obligation of radio

wave is imposed on a condition prescribed in advance;

at least one of second transferring units each being provided corresponding to each of at least one of wireless systems to which transmission suspension obligation of radio wave is not imposed;

at least one of failure detectors each being provided corresponding to each of said second transferring units, which detect a failure of the corresponding second transferring unit; and

a transmission suspension controller which supplies a transmission suspension control signal to all of said first and second transferring units, when determined to be failed by at least one of said failure detectors,

wherein said first and second transferring units have transmission suspension units which suspend transmission of radio wave, upon receiving said transmission suspension control signal.

19. The wireless communication terminal according to claim 18, wherein said second transferring unit includes:

a digital unit which performs digital signal processing to generate a digital transmission signal, and outputs an operational status report signal for every a prescribed time interval;

a D/A converter which converts said digital transmission signal into an analog transmission signal;

a modulator which performs modulation processing for said analog transmission signal to generate the modulation signal;

a power amplifier which performs power amplifier of said modulation signal; and

a power supply unit which supplies power to at least said power amplifier,

wherein said failure detector includes:

a first failure determination unit which determines whether or not said digital unit is out of order depending



on whether or said operational status report signal is received for every a prescribed time interval; and

a second failure determination unit which measures an amplified power of said power amplifier, and determines whether or not to be out of order depending on whether or not a measured value is within a prescribed power range; and

said transmission suspension controller outputs said transmission suspension control signal, when at least one of said first and second failure determination units determines to be out of order.

20. The wireless communication terminal according to claim 19, wherein said first failure determination unit determines to be out of order when said operational status report signal is not received for every a prescribed time interval; and

said second failure determination unit determines to be out of order when said amplified power of said power amplifier is not within a range of a prescribed value prescribed in advance.